

Work Order ID 161702

161702

Page 1

Tuesday, May 23, 2017 9:31:15 AM

Item ID: D3015-3 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Locknut
 Start Date: 5/24/2017 Start Qty: 100.00 *100* Cust Item ID:
 Required Date: 5/31/2017 Req'd Qty: 100.00 *100* Customer:
 Reference:

Approvals: Process Plan: DAS 21 Date: MAY 23 2017 Tooling: _____ Date: _____ Run Start *NR1*
 QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3015	Rev C

100 PURCHASING 0.00 100 MAY 29 2017 DAS 13 9-89
 100
 Purchasing
 Purchasing
 Memo
 Issue P/O: 36479
 Description: SS locknut with nylon insert
 Possible Supplier: Main Industrial P/N: PFS LNNC516S1
 Material release note required

110 Receive & Inspect for Damage & Mat'l Certs 0.00
 110
 Packaging
 Packaging
 Memo
 Ensure Material Release Note is attached
100x Sp17-5-30

120 QC6- All purchased or subcontracted products 0.00
 120
 QC
 Quality Control
 Memo
100 MAY 31 2017 DAS 38 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 161702***161702***

Page 2

Tuesday, May 23, 2017 9:31:15 AM

Item ID: D3015-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Locknut
Start Date: 5/24/2017 Start Qty: 100.00 ***100*** Cust Item ID:
Required Date: 5/31/2017 Req'd Qty: 100.00 ***100*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>Sto15</u>	0.00							
130						<u>100</u>	<u>6</u>	<u>DAS</u>	<u>MAY 31 2017</u>
Packaging	Memo	1.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	10.00							<u>17/6/2</u>
Quality Control									

DAS
21
9-89

MAY 31 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

Picklist Print

Tuesday, May 23, 2017 9:31:13 AM

Page 1

Work Order ID: 161702

161702

Parent Item: D3015-3

D3015-3

Parent Item Name: Locknut

Start Date: 5/24/2017

Required Date: 5/31/2017

Start Qty: 100.00

Required Qty: 100.00

Comments: IPP: A01.06.28New IssueSM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
PFS-LNNC5/16S1		Purchased	No			110	Each	0.0000	1	100			
PFS-I NNC5/16S1									**				
Lock Nut													

100X SP/7-5-30

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

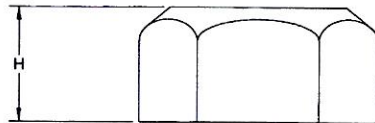
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
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Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

SPECIFICATION CONTROL DRAWING



D3015-X LOCKNUT

PART NUMBER	SIZE	HEIGHT H	POSSIBLE SUPPLIER
D3015-1	1/4-20 UNC	0.31	ACKLANDS, P/N PFSLNNC14S1
D3015-3	5/16-18 UNC	0.34	ACKLANDS, P/N PFSLNNC516S1
D3015-5	7/16-14 UNC	0.46	ACKLANDS, P/N PFSLNNC716S1
D3015-7	M5	0.19	ACKLANDS, P/N FLMN021-005-0000



NOTES:

- 1) MATERIAL: SS LOCKNUT WITH NYLON INSERT
- 2) FINISH: N/A
- 3) TOLERANCES: ALL DIMENSIONS SHOWN AS REFERENCE
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 161702 MJS

1705-23

RELEASED
(Handwritten signature/initials)

C	REFORMAT DWG. 7 P/N NOW FLMN021-005-0000 WAS LNNMSS1 (ZN B8-1), PAR 09-020	CP	09.07.08
B	ADD D3015-7	KJ	03.07.15
A	NEW ISSUE	DS	01.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>(Signature)</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3015 REV. C TITLE LOCKNUT SCALE NTS SHEET 1 OF 1	
DRAWN	<i>(Signature)</i>		
CHECKED	<i>(Signature)</i>		
MFG. APPR.	<i>(Signature)</i>		
APPROVED	<i>(Signature)</i>		
DE APPR.	<i>(Signature)</i>		
DATE	09.07.08	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO36479**

Purchase Order Date 5/29/2017

PO Print Date 5/29/2017

Page Number 1 of 2

Order From :

VC-MAI001

Ship To : DART AEROSPACE LTD

MAIN INDUSTRIAL SALES LTD.
1475, TESSIER
HAWKESBURY, ON K6A 3S6
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA



Contact Name

Vendor Phone 613 632 3595

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	240-107 spaneaur part #	SPRING SLOTTED PIN	5/31/2017 Yes 5/31/2017		100.00 Each	\$0.37	\$37.00
Line Total:							\$37.00
2	PFS-LNNC5/16S1 AS PER DWG D3015 REV. C B161702	Lock Nut	5/31/2017 Yes 5/31/2017		100.00 Each	\$0.09	\$9.10
Line Total:							\$9.10
3	PFS-LNSCC14P AS PER DWG D3014 REV. A B161704	LOCKNUT	5/31/2017 Yes 5/31/2017		50.00 Each	\$0.07	\$3.50

Note:

5/29/2017

MAIN INDUSTRIAL SALES LTD.

1475 TESSIER ST.
HAWKESBURY ON K6A 3S6
Phone: (613) 632-3595 Ext. Fax: (613) 632-0262
sales@mainindustrialsales.com

Packing Slip

DATE May 30, 2017
NUMBER 0000207632
CUSTOMER NO. DART

BILL TO:

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON K6A 1K7

SHIP TO:

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON K6A 1K7

(613) 632-5200 Ext.

(613) 632-5200 Ext.

P.O. NUMBER	SALESPERSON	ORDER DATE	REQ. DATE	ORDER NUMBER
36479	EB	30-May-17		0000207632
F.O.B.	SHIP VIA	TERMS		
F.O.B. value	OUR TRUCK / LOCAL	NET 30 DAYS		
PART NUMBER	LOCATION	UOM	QUANTITY	B.O.
DESCRIPTION			REQ.	SHIPPED
0-240107 1/8" x 1.1/8" 302 STAINLESS SLOTTED SPRING TENSION PINS		EA	100	100
0-516CNLNSS 5/16-18 18-8 NYLON LOCKNUT	26C6	EA	✓ 100	100
YOUR PART #: PFS-LNNC5/16S1				
13-14CSLN 1/4-20 TYPE C STOVER LOCKNUT	24B0	EA	50	50
YOUR PART #: PFS-LNSCC14P				

8017-5-30